

AMENDMENTS TO THE CLAIMS

The following is a complete listing of all claims presently in this application, including the Previously Presented claims added by way of this Response and statements identifying the claims canceled by way of this Response.

Claims 1-96 (Canceled).

(Currently Amended) 97. A surgical tool system, said system comprising:

- a plurality of surgical handpieces, each said handpiece including:

- a power generating unit which is actuated in response to application of an energization signal;

- an accessory connected to said power generating unit for receiving energy output by said power generating unit that is configured to apply the energy to a surgical site; and

- a memory containing data for regulating the application of the energization signal to the power generating unit, wherein said memories of said plural handpieces contain different data; and

- a console, said console comprising:

- a plurality of sockets to which said hanpieces are simultaneously connected wherein, each said handpiece is removably connected to a separate said socket;

- a driver configured to supply energization signals to said handpiece power generating units;

- a control unit connected to said sockets for reading the data in said handpiece memories and connected to said

driver for regulating the output of energization signals by said driver, said control unit configured to:

read and retain the data stored in each said handpiece memory so that said control unit contains the data from the plural handpiece memories;

determine if one of said handpieces is to be actuated; and

for the said handpiece to be actuated, regulate the output of energization signals by said driver for said power generating unit of the said handpiece based on the previously ~~retained~~ retained data from the associated said handpiece memory.

(Previously Presented) 98. The surgical tool system of Claim 97, wherein said control unit is configured to sequentially regulate the generation of the energization signals said driver applies to a first one of said handpieces based on the previously retained data from the memory associated with the first said handpiece and then regulate the generation of the energization signals said driver supply supplies to a second one of said handpieces based on the previously retained data from the memory associated with the second said handpiece.

(Previously Presented) 99. The surgical tool system of Claim 97, wherein at least one said accessory is releaseably connected to the said power generating unit of said handpiece to which said accessory is connected.

(Previously Presented) 100. The surgical tool system of Claim 97, wherein said console is configured so that, at any given instant, said driver supplies energization signals to less than all of said handpiece power generating units connected to said console.

(Previously Presented) 101. The surgical tool system of Claim 97, wherein said console is configured so that, at any given instant, said driver supplies energization signals to a single one of said handpiece power generating units connected to said console.

(Currently Amended) 102. The surgical tool system of Claim 97, wherein:

each said handpiece includes a sensor that generates a variable sensor signal to said console;

the handpiece memory data for each said handpiece includes data for producing a corrected sensor signal; the data for producing the corrected sensor signal being different for each said handpiece sensor; and

said control unit is further configured to:

retain the data from said plural handpiece memories used to produce the corrected sensor signals; and

when ~~controlling~~ regulating the generation of energization signals for application to a particular one of said handpiece power generating units, based upon the sensor signal from the said sensor associated with the said handpiece and the data for producing the corrected sensor signal for the said handpiece sensor ~~contained~~ retained in said control unit,

produce a corrected sensor signal; and, based on the corrected sensor signal, ~~control~~ regulate the generation of the energization signal by said driver.

(Previously Presented) 103. The surgical tool system of Claim 97, wherein:

the data in said handpiece memory for each handpiece includes data defining at least one of the maximum voltage or current of the energization signal that is to be applied to said handpiece power generating unit, the maximum voltage or current data being different for each said handpiece power generating unit; and

said control unit is further configured to:

retain the data from said handpiece memories defining at least one of the maximum voltage or current to be applied to the said power generating units; and

regulate the generation of the energization signals to each said handpiece power generating unit based on the maximum voltage or current data for the said power generating unit previously retained by said control unit.

(Currently Amended) 104. The surgical tool system of Claim 97, wherein at least one said handpiece includes a housing in which said power generating unit is disposed and from which said ~~cutting~~ accessory extends.

(Currently Amended) 105. The surgical tool system of Claim 97, wherein at least one said handpiece includes a housing in

which said power generating unit and said handpiece memory are disposed and from which said ~~cutting~~ accessory extends.

(Previously Presented) 106. The surgical tool system of Claim 97, wherein said control unit is configured:

to determine when a first handpiece is disconnected from one of said sockets and a second handpiece is coupled to the said socket; and

when the second said handpiece is coupled to the said socket, read and retain the data contained in the said memory of the said second handpiece so that said control unit contains the data associated with the second said handpiece and the data read and retained from the said handpiece memory of the at least one other handpiece connected to the at least one other said socket.

(Currently Amended) 107. A surgical tool system, said system comprising:

a plurality of surgical handpieces, each said handpiece including:

a power generating unit which is actuated in response to an energization signal;

an accessory connected to said power generating unit for receiving energy output by said power generating unit, said accessory being configured for application to a surgical site;

a sensor for providing a sensor signal used to regulate the actuation of said power generating unit; and

a memory containing data for correcting the sensor signal; and

a console, said console comprising:

a plurality of sockets to which said handpieces are simultaneously connected and wherein, each said handpiece is removably connected to a separate said socket;

a driver configured to supply an energization signal to said handpiece power generating units;

a control unit connected to said sockets for reading the sensor signal correction data in said handpiece memories and the sensor signals from said handpiece sensors and connected to said driver for regulating the output of energization signals by said driver, said control unit configured to:

read and retain from each said handpiece memory the sensor signal correction data so that said control unit contains therein the sensor correction data for said sensors of the plural said handpieces;

determine if one of said handpieces is to be actuated;

for the said handpiece to be actuated, based on the sensor signal from the said handpiece and the previously retained sensor signal correction data, produce a corrected sensor signal; and, based on the corrected sensor signal, regulate the generation of the energization signal output by said driver for application to the said power generating unit of said handpiece.

(Previously presented) 108. The surgical tool system of Claim 107, wherein said control unit is configured to sequentially regulate the generation of the energization signals said driver applies to a first one of said handpieces based on the sensor signal correction data previously retained from the said memory associated with the first said handpiece and then regulate the generation of the energization signals said driver supplies to a second one of said handpieces based on the sensor signal correction data previously retained from the said memory associated with the second said handpiece.

(Previously Presented) 109. The surgical tool system of Claim 107, wherein said console is configured so that, at any given instant, said driver supplies energization signals to less than all of said handpiece power generating units of said handpieces connected to said console.

(Previously Presented) 110. The surgical tool system of Claim 107, wherein the said sensor of at least one said handpiece is configured to vary said sensor signal as a function of a user-actuated control member.

(Previously Presented) 111. The surgical tool system of Claim 107, wherein at least one said handpiece includes a housing in which said power generating unit and said handpiece memory are disposed and from which said accessory extends.

(Previously Presented) 112. The surgical tool system of Claim 107, wherein the said power generating unit of at least one said handpiece is a motor.

(Currently Amended) 113. The surgical tool system of Claim 107, wherein at least one said handpiece includes a coupling assembly for releaseably holding said ~~cutting~~ accessory to said power generating unit.

(Currently Amended) 114. The surgical tool system of Claim 107, wherein:

the data in said handpiece memory for each handpiece further includes data defining at least one of the maximum voltage or current of the energization signal that is to be applied to said handpiece power generating unit, the maximum voltage or current data being different for each said handpiece power generating unit; and

said control unit is further configured to:

retain the data from said handpiece memories defining at least one of the maximum voltage or current to be applied to the said power generating units; and

further regulate the generation of the energization signals to each said handpiece power generating unit based on the maximum voltage or current data for the said power generating unit previously retained by said control unit.



(Currently Amended) 115. The surgical tool system of Claim 107, wherein said control unit is further configured to:  
~~to~~ determine when a first handpiece is disconnected from one of said sockets and a second handpiece is coupled to the said socket; and

when the second said handpiece is coupled to the said socket, to read and retain the sensor signal correction data contained in the said memory of the said second handpiece so that said control unit contains the sensor signal correction data associated with the second said handpiece and the sensor signal correction data previously retained from the said handpiece memory of the at least one other handpiece connected to the at least one other said socket.

(Currently Amended) 116. A surgical tool system, said system comprising:

a plurality of surgical handpieces, each said handpiece including:

a variable speed, electrically actuated motor;  
an accessory connected to said motor for actuation by said motor, said accessory configured for application to a surgical site; and

a memory, said memory containing speed control data for said handpiece motor wherein, the motor speed control data are different for each handpiece motor;

a console, said console including:

a plurality of sockets to which said handpieces are simultaneously connected wherein, each said handpiece is removably connected to a separate one of said sockets;

a driver configured to supply energization signals to said handpiece motors;

a control unit connected to said sockets and to said driver, said control unit configured to:

read through said sockets and retain the motor speed control data from said handpiece memories so that said control unit ~~contains~~ stores therein the motor speed control data for the plural handpiece motors;

determine if one of said handpiece motors is to be actuated; and

for the said handpiece motor to be actuated, based on the motor speed control data previously stored by said control unit, control the application of energization signals to said motor by said driver.

(Currently Amended) 117. The surgical tool system of Claim 116, wherein said control unit is configured to sequentially regulate the application of the energization signals said driver applies to a first one of said handpiece motors based on the motor speed control data previously ~~retained~~ stored for the first said handpiece and then regulate the application of the energization signals said driver supplies to a second one of said handpiece motors based on the previously ~~retained~~ stored motor speed control data for the second said handpiece.

(Previously Presented) 118. The surgical tool system of Claim 116, wherein said driver is configured to, at a given

time, supply energization signals to less than all said motors of said handpieces connected to said console.

(Previously Presented) 119. The surgical tool system of Claim 116, wherein said driver is configured to, at a given time, supply energization signals to a single one of said handpiece motors of said handpieces connected to said console.

(Previously Presented) 120. The surgical tool system of Claim 116, wherein said motor speed control data associated with each said handpiece motor includes data defining a maximum speed of said motor.

(Currently Amended) 121. The surgical tool system of Claim 120, wherein:

each said handpiece includes a sensor that generates a variable sensor signal to said console;

the handpiece memory data for each said handpiece further includes data for producing a corrected sensor signal; the data for producing the corrected sensor signal being different for each said handpiece; and

said control unit is further configured to:

~~retain~~ store the data from said plural handpiece memories used to produce the corrected sensor signals; and

when controlling the generation of energization signals for application to a particular one of said handpiece motors, based upon the sensor signal from said sensor associated with said handpiece and the previously stored data for producing the corrected sensor signal for the said

handpiece contained in said control unit, produce a corrected sensor signal; and, based on the corrected sensor signal, control the generation of the energization ~~signal~~ signals by said driver.

(Previously Presented) 122. The surgical tool system of Claim 116, wherein said motor speed control data associated with each said handpiece motor includes data defining, for a plurality of different motor speeds, the maximum current said motor should draw.

(Currently Amended) 123. The surgical tool system of Claim 116, wherein said control unit is further configured to:  
to determine when a first handpiece is disconnected from one of said sockets and a second handpiece is coupled to the said socket; and

when the second said handpiece is coupled to the said socket, to read and ~~retain~~ store the motor speed control data contained in the said memory of the said second handpiece so that said control unit ~~contains~~ stores the motor speed control data associated with the second said handpiece and the motor speed control data previously ~~retained~~ stores from the said handpiece memory of the at least one other said handpiece connected to the at least one other said socket.